



ATTACHMENT A

REMARKS

Considering the matters raised in the Office Action in the same order as raised, claim 2 has been rejected under 35 USC 112, second paragraph, as being "indefinite." The basis for the rejection is that the phrase "conveying means" lacks antecedent basis. Claim 2 has been amended to change "conveying means" to -- conveying device -- so as to overcome this rejection. The Examiner is thanked for pointing out this error. It is noted that claim 16 has also been amended to replace the term "conveying means" by - - conveying device --.

Claims 1, 2, 6 and 16 have been rejected under 35 USC 102(b) as being "anticipated by" the newly cited Williams reference. This rejection is respectfully traversed although claim 1 has been canceled and replaced by a new claim 18 which even more clearly defines over the cited art.

Turning first to the content of claim 18, this claim recites that the conveying arrangement is "self-cleaning" and operates such that a "freshly cleaned and decontaminated conveying surface is returned to the conveying run." These recitations are supported, inter alia, by the disclosure at page 1, first paragraph. Claim 18 also recites that the conveying surface has a cyclic path, including a conveying run and a return run. This recitation is based on the wording at page 3, beginning at line 10. Although this wording uses the term "return run," it does not specifically use the term "conveying run" although it is believed that this is implicit from the disclosure in question and, moreover, is fully supported by the drawings. Claim 18 further recites that the decontamination arrangement is arranged to act on the conveying surface in the return run. This recitation is supported, inter alia, by lines 13 and 14 of page 3.

New dependent claims have also been added. New claim 19 recites that the second cleaner comprises an array of UV lamps directed to irradiate the conveying surface, as is disclosed at lines 17-20 of page 6. New claim 20 recites the presence of a drying device for drying the conveying surface, located between the first and second cleaners. This recitation is based on, for example, lines 2-5 of page 12. Relevant disclosure is also provided at lines 9-14 on page 5 and lines 7-9 on page 6. New claim

21 recites a maximum for the spacing of the UV radiation sources from the belt surface, and is supported, inter alia, by lines 6-8 of page 3.

Turning now to the Williams reference, it is first noted that Williams discloses a food processing system including a continuously running belt. The system has a normal operational mode, and a separate cleaning and sanitizing mode. This is clear from, for example, lines 27-32 of column 4, which refer to "periodically the system is shut down for the mechanical mode cleaning and sanitizing operation." This operation is distinct from the continuous operation of the apparatus of the present invention.

Williams does disclose the use of "at least two sanitizing spray bath stations 60 and 30" which spray the belt with detergent spray and rinsing water "continuously whenever the belt moves" (column 3, line 65 to column 4, line 5). This teaching of Williams obviously bears some similarity to the "first cleaner which comprises a sprayer" recited in claim 18. However, it is respectfully submitted that there is nothing disclosed in Williams corresponding to the second cleaner recited in claim 18.

In applying Williams to the claims, the Examiner makes reference to "first cleaner 87." However, it is respectfully submitted that the spray nozzle rod 87 is used only in the cleaning and sanitizing mode, and not during normal operation (see column 4, lines 27-60). Further, the action of the spray rod 87 is on the main conveying run of the conveyor, and not on a return run. Moreover, it is clear that spray rod 87 could not function during the normal operation of the device or else it would be spraying the foodstuff that is intended to be cooked during the normal operation of the device.

Further, concerning the second cleaner which subjects the surface to UV irradiation, the Examiner refers to element 42. Element 42 is a heater for generating steam for cooking food. It is respectfully submitted that any generation of UV by such a conventional water heater would be de minimus and thus the proposed reading of heater 42 as the second cleaner is improper. Further, any radiation that would be generated by the heater would be directed to the underside of the belt, not to the conveying surface.

It is also argued in the Office Action that the internal surface of the chamber 40 is designed to reflect radiation inwardly. It is respectfully submitted that this is incorrect. In this regard, the passages at column 1, line 48 and column 2, line 56 that have been

cited by the Examiner, merely refer to a desire to limit heat loss, by the use of "small insulated cooking and chilling cabinets with far less energy loss from radiation and attrition." it is respectfully submitted that this is merely a teaching of the use of a cabinet which is insulated, and certainly does not teach anything with respect to UV reflection. In any event, as indicated above, claim 18 recites that the contamination arrangement, including the second cleaner, acts on the conveying surface in the return run, which is clearly not the case with the heater 42 of Williams.

In summary, for all of the reasons set forth above, it is believed that new claim 18 patentably defines over Williams.

Considering the dependent claims, new claim 19 recites that the second cleaner comprises an array of UV lamps and thus even more clearly distinguishes from the water heater 42 of Williams to which the Examiner has made reference.

New claim 20 recites a drying device which is a further distinguishing feature over Williams. In this regard, Williams stresses that everything should be kept moist. See, in particular, column 3, lines 23-31, which make reference to the atmosphere being kept "near 100% humidity ... This prevents any dehumidification of the product as well and keeps all equipment humid."

New claim 21 recites that the clearance between the conveying surface and the nearer of the sources of UV radiation is less than 50mm and thus further defines over Williams.

In addition, it is respectfully submitted that some of the original dependent claims also separately define over Williams. For example, with respect to claim 6, which now depends from new claim 18, there is no disclosure in Williams of a second cleaner acting on a flexure on the return path.

Claims 1-6 and 16 have been rejected under 35 USC 103(a) as being unpatentable over Williams in view of Kornely. This rejection is respectfully traversed as applied to the new claims now presented.

Kornely discloses a highly specialized apparatus involving a die set for forming metal blanks. The apparatus includes a conveyor, and a belt cleaning unit 26. The latter includes spray nozzles 118, magnets for removing ferrous metallic particles, and squeegee blades 96. The principal function of the squeegee blades is to remove water

from the belt but they also serve to “physically contact and dislodge such particles or other dirt from the belt” (column 6, lines 33 and 34). Unit 132, which the Examiner reads as a “scraper,” is actually an entrance roller, forming part of an assembly for adjustably supporting the belt at the belt entrance side of the main body (see column 5, line 66 to column 6, line 5).

As discussed above, a major concern of the Williams reference is to keep the system moist, so that food residues do not dry on the belt and so that cleaning can be effected merely by spraying. It is respectfully submitted that it would be contrary to the thrust of the teachings of the Williams reference to attempt to combine Williams with Kornely (which relates to a completely different art), and, in particular, to extract from Kornely the idea of using a squeegee blade assembly. Moreover, the combination, even if made, would still lack several features of the present invention as now claimed in the claims presented.

Considering some of the specific claims to which the Examiner has made reference, because neither Williams or Kornely teaches UV radiation, it is respectfully submitted that it would not be obvious to “modify” Williams by increasing the output of the water heater 42 to generate substantial, bactericidal amounts of UV radiation.

Claim 7 has been rejected under 35 USC 103(a) as being unpatentable over Williams in view of Kornely and “further in view of Smith.” This rejection is respectfully traversed as applied to new the combination of new claim 18 and claim 7.

Smith concerns a conveyor belt for conveying coal which must be kept moist to reduce dust hazards. As a consequence, a moisture sensor is provided “for monitoring and maintaining moisture contents of such conveyor belts” (column 1, lines 8 and 9). In the operation of the Smith conveyor, “when the sensing circuit 14 determines that the moisture level has fallen below a preset threshold, it activates the valve 18 to furnish water from the water supply 16 to the sprayer bar 20, to moisten the top surface 22 of the return portion 24 of the endless conveyor” (column 4, lines 44-48). It is respectfully submitted that the teachings of Smith are completely different in concept and intention from the device of claim 7 for detecting the presence of residual matter which the cleaners are intended to remove. Thus, it is respectfully submitted that there is no way

in which the Smith patent would be meaningfully combined with the Williams and Kornely references given the actual teachings of the three references.

Allowance of the application in its present form is respectfully solicited.

END REMARKS